

Title (en)
A METHOD FOR OPERATING AN INTERNAL COMBUSTION ENGINE SYSTEM

Title (de)
VERFAHREN ZUM BETRIEB EINES VERBRENNUNGSMOTORSYSTEMS

Title (fr)
PROCÉDÉ DE FONCTIONNEMENT D'UN SYSTÈME DE MOTEUR À COMBUSTION INTERNE

Publication
EP 3841289 C0 20240501 (EN)

Application
EP 18765567 A 20180823

Priority
EP 2018072724 W 20180823

Abstract (en)
[origin: WO2020038576A1] The invention relates to a method for operating an internal combustion engine system (2), wherein the internal combustion engine system (2) is provided with an air intake duct (3), an exhaust gas duct (4) and an exhaust gas recirculation (EGR) system (5), wherein the EGR system (5) comprises an EGR conduit (6) that fluidly connects the exhaust duct (4) and the intake duct (3), and wherein a gas feeding device (7) configured to feed exhaust gas from the exhaust duct (4) to the intake duct (3) is arranged in the EGR conduit (6). The method is characterized in that it comprises the step of: detecting an indication of accumulated deposits of soot, hydrocarbons or other contaminants in the gas feeding device (7) by determining whether a rotational friction of a rotary member (71, 72) of the gas feeding device (7) exceeds a threshold value. The invention also relates to an internal combustion engine system (2) configured for being operated by such a method and to a vehicle (1) provided with such an engine system (2). The invention further relates to means for controlling the above method.

IPC 8 full level
F02D 41/06 (2006.01); **F02D 41/00** (2006.01); **F02D 41/22** (2006.01); **F02M 26/33** (2016.01); **F02M 26/34** (2016.01); **F02M 26/35** (2016.01); **F02M 26/36** (2016.01); **F02M 26/49** (2016.01); **F02M 26/50** (2016.01)

CPC (source: EP US)
F02D 41/0055 (2013.01 - EP US); **F02D 41/06** (2013.01 - US); **F02D 41/064** (2013.01 - EP); **F02D 41/22** (2013.01 - EP US); **F02M 26/33** (2016.02 - EP US); **F02M 26/34** (2016.02 - EP US); **F02M 26/35** (2016.02 - EP US); **F02M 26/36** (2016.02 - EP US); **F02M 26/49** (2016.02 - EP US); **F02M 26/50** (2016.02 - EP US); **F02D 2200/021** (2013.01 - EP); **Y02T 10/40** (2013.01 - EP)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Participating member state (EPC – UP)
AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)
WO 2020038576 A1 20200227; CN 112601885 A 20210402; CN 112601885 B 20230526; EP 3841289 A1 20210630; EP 3841289 B1 20240501; EP 3841289 C0 20240501; US 11346309 B2 20220531; US 2021180533 A1 20210617

DOCDB simple family (application)
EP 2018072724 W 20180823; CN 201880096838 A 20180823; EP 18765567 A 20180823; US 201817270309 A 20180823